

LECTOTYPIFICATION AND NOTES ON
BACCHARIS RIOGRANDENSIS (ASTERACEAE: ASTEREAE)

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ABSTRACT

Baccharis riograndensis Malag. & J.E. Vidal, an endemic species from southern Brazil, was described based on two syntypes and two paratypes. Until now, no lectotype was designated. Study of original material and a major number of other herbarium materials confirm the distinctiveness of the taxon. *Baccharis riograndensis* is lectotypified and additional data, including a diagnostic description, illustrations, specimen citations, geographic range map and IUCN (2001) status of conservation are presented.

RESUMO

Baccharis riograndensis Malag. & J.E. Vidal, uma espécie endêmica do sul do Brasil, foi descrita com base em dois sintipos e dois parátipos. Embora a espécie tenha sido citada em vários trabalhos, nenhuma lectotipificação foi feita até o momento. O estudo do material original em conjunto com a revisão de coleções em herbários confirmou a individualidade do táxon. *Baccharis riograndensis* é lectotipificada e dados adicionais, incluindo uma descrição diagnóstica, ilustrações, distribuição geográfica e estado de conservação, segundo os critérios da IUCN, são apresentados.

Baccharis riograndensis Malag. & J.E. Vidal, an endemic species from Rio Grande do Sul State, in southern Brazil, was described by Malagarriga (1949, under his monk name Irmão Teodoro Luis) based on two specimens collected by J.E. Vidal (syntypes) and two collections (paratypes) made by Malagarriga himself. After the publication, accounts of this species appeared in the taxonomic literature several times (Malagarriga 1957, 1958, 1977; Barroso 1976; Diesel 1987; and Oliveira et al. 2007), but no lectotypification was made.

The study of the syntypes housed at Herbarium R, Museu Nacional do Rio de Janeiro, along with general collections from various herbaria, confirmed this taxon as distinct and allowed a choice of lectotype. Along with the lectotypification, additional data are presented, including a morphological description, illustration, specimen citations, geographic distributional map, and IUCN (2001) status of conservation.

Baccharis riograndensis Malag. & J.E. Vidal, Bol. Inform. Inst. Geobiol. 1:13. 1949. (**Fig. 1**). TYPE: BRASIL. RIO GRANDE DO SUL: Santa Maria, Boca do Monte, Mar 1939, ♀, J.E. Vidal 37006 (LECTOTYPE, designated here: R!).

Diagnostic description.—Subshrub, 25–65 cm tall. Stems mostly erect, sometimes short reptant and decumbent, 3-angled, indument of clavate uniseriate hairs in tufts, wings of vegetative branches undulate, 0.5–5 cm long, 0.25–0.75 cm wide, fertile branches distinctly winged, wings narrower, 0.1–0.2 cm wide. Leaves reduced to scales 0.1–0.2 cm long, 0.1–0.25 cm wide. Capitulescence a panicle of pseudospikes, 5–25 cm long, lateral spikes reduced to solitary sessile capitula, not arranged in glomerules. Male capitulum: involucre campanulate 3.5–5.5 mm long, 3.5–4 mm wide, phyllaries in 4–5 series, the outer oblong, the mediums ovate, the inner short lanceolate, apex obtuse, margins narrowly hyaline, entire to short toothed apically. Flowers 18–30 [40], pappus 4–5 mm long, uniseriate, 20–22 bristles, corolla 3–5 mm long, apically 5-lobed, tube 2.8–3.3 mm, throat 0.2–0.3 mm, lobes 1.5–2 mm, style 4–5 mm long, style apex not divided. Female capitulum: clinanthium alveolate, bearing biseriate hairs, involucre cylindrical, 7–10 mm long, 2–3 mm wide, phyllaries in 4–7 series, the outers short ovate becoming more linear onwards the innermost series, apex acute, margins narrowly hyaline, entire to short toothed apically. Flowers 30–40, pappus 7–8 mm

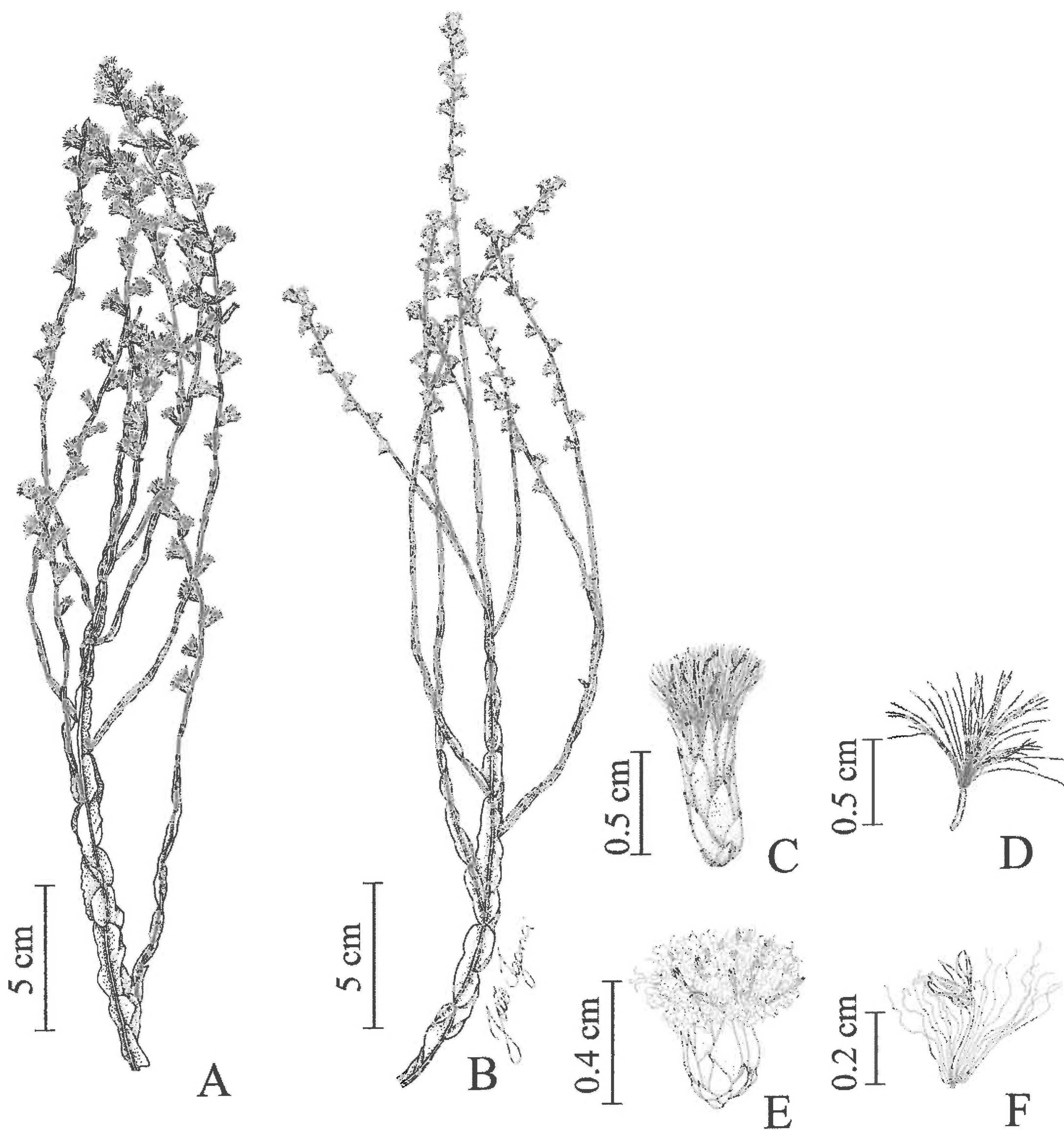


FIG. 1. *Baccharis riograndensis*. A. Habit of female plant, B. Habit of male plant, C. Female capitulum, D. Female flower, E. Male capitulum, F. Male flower. G. Heiden 648 (A, C and D); G. Heiden 649 (B, E and F).

long, uniseriate, corolla 5–7 mm long, ligulate with the ligule 5-toothed, style 7–7.5 mm long, cypselas 2.5–4 mm long, cylindrical, 12–20 ribbed, surface few papillose and glabrous. Chromosome number $2n = 18$ (Heiden et al. 2006).

Etymology.—The name of the species refers to the type locality.

Vernacular names.—carqueja, chirca.

Phenology.—Fertile between December and March; dispersion of cypselas may last until June.

Geographic range.—Known only from the state of Rio Grande do Sul, Brazil (Fig. 2).

Conservation.—Although an endemic with restricted area in Rio Grande do Sul, the species is abundantly found in dry or rocky grasslands, mainly in the southern half of the state (granite sites in the Pampa biome),

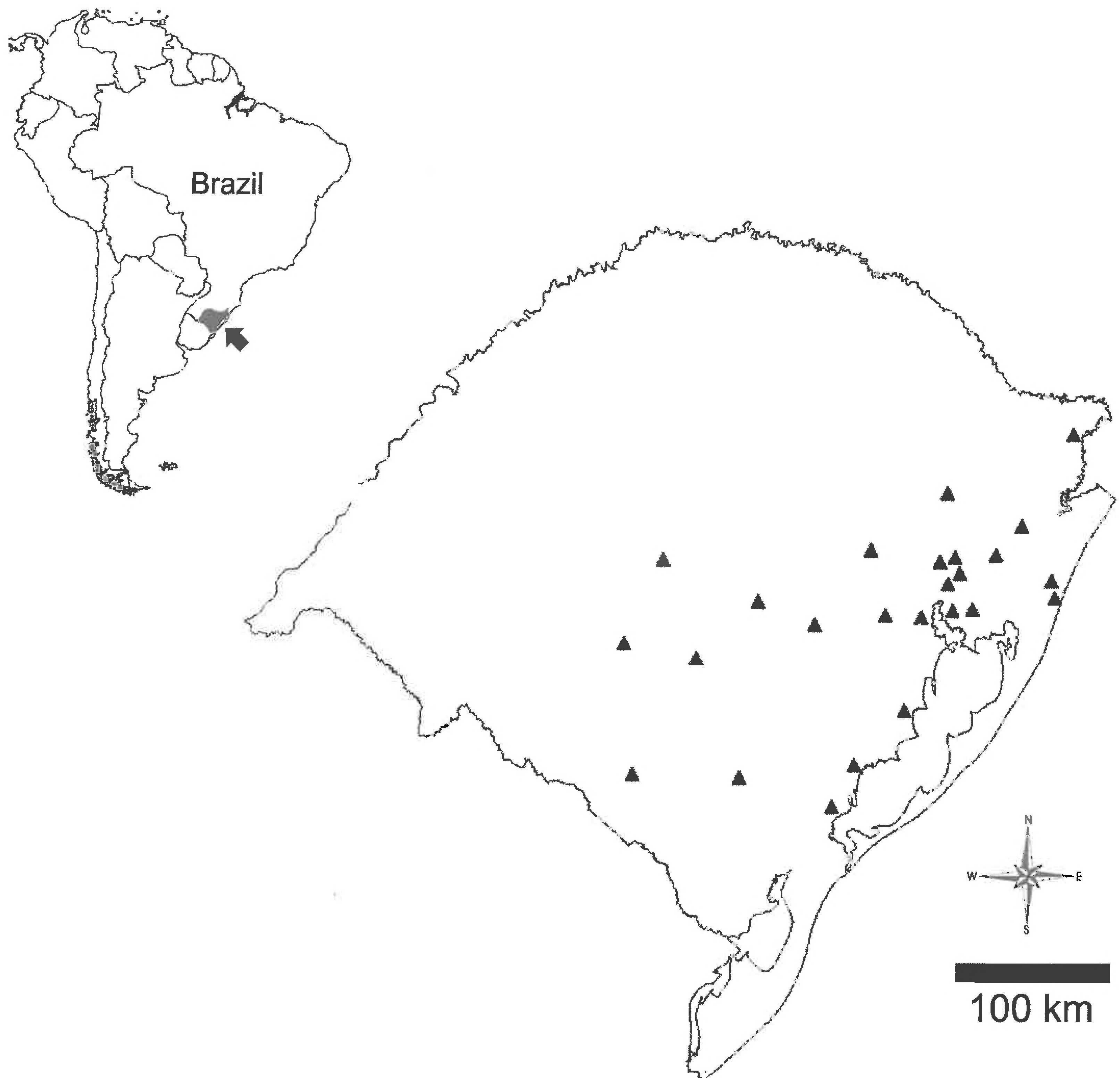


FIG. 2. Geographic range of *Baccharis riograndensis* (Asteraceae, Astereae) in Rio Grande do Sul State, southern Brazil.

and sparsely in the northern half (islands of discontinuous grassland areas on plateau sites inserted in the Atlantic Forest biome). Increasing land use and planned forest projects may disrupt the habitat of the species. Due to the anthropogenous pressure on the south Brazilian subtropical grasslands (*campos*) with the increasing of displacement of native vegetation in substitution to large-scale *Eucalyptus* and *Pinus* plantations, the species is regarded as Near Threatened (NT), concerning the IUCN (2001) status of conservation.

Comments.—*Baccharis riograndensis* is assigned to subgen. *Molina* Heering and sect. *Caulopterae* DC., to the latter mainly due to presence of winged stems, clinanthium with glandular hairs, and pappus bristles of female flowers that are enlarged basally and fused into a ring. *Baccharis riograndensis* is sympatric in its entire limited range to *Baccharis crispa* Spreng., which has a wider distributional area in southeastern South America. Similar characteristics to the both species are the similar habitat, erect branches with undulate wings, involucre of male capitula campanulate and uniseriate pappus in male and female flowers. *Baccharis riograndensis* differs from *B. crispa* due to the fertile branches distinctly narrow-winged (vs. not distinctly winged fertile branches), lateral spikes reduced to solitary capitula (vs. lateral spikes fully developed or

with reduced axis seeming glomerules), involucre of female capitula cylindrical (vs. campanulate) and larger cypselas, 2.5–4 mm long (vs. smaller, 1–1.5 mm long). Another taxon, similar to *B. riograndensis*, is the alopatric *Baccharis genistelloides* subsp. *lorentzii* Joch. Müll., from central Argentina, which shares some characteristics with *B. riograndensis*, such as the pseudospikes with the lateral spikes generally reduced to one capitulum, cylindrical involucre of female capitula and larger capitula and cypselas, but differs on the basis of its erectopotent branching (vs. erect), usually narrower capitulescences (vs. wider), fertile branches not distinctly winged (vs. distinctly narrow-winged fertile branches), fewer cypselas ribs (9–12 vs. generally 12–20) and multiseriate pappus (vs. uniseriate).

Representative specimens: **BRAZIL. RIO GRANDE DO SUL: Arroio dos Ratos:** Fazenda Faxinal, 10 Mar 1977, K. Hagelund 10967 (ICN); Fazenda Faxinal, 13 Feb 1978, K. Hagelund 12057 (ICN). **Bagé:** BR-153, km 84, 1 June 1985, M. Sobral & C. Grabauska 3920 (ICN); Casa de Pedra, 12 Apr 1991, M.R. Ritter 612 (ICN); começo do Passo do Enforcado, 70 km NE de Bagé, 5 Mar 1981, J.C. Lindeman et al. 6997 (CNPO); Passo do Velhaco, 21 Mar 2001, V. Marin 20 (CNPO); ponte sobre o Arroio Traíras, RS-153, 28 Mar 1985, O. Bueno 4312 (HAS). **Caçapava do Sul:** à 8 km da rodovia para Bagé, 10 Mar 1982, J. Mattos 23628 (HAS); à 8 km da rodovia para Bagé, 10 Mar 1982, J. Mattos & N. Mattos 23630 (HAS). **Caxias do Sul:** Ana Rech, 12 Feb 2000, A. Kegler 678 (HUUCS). **Cachoeira do Sul:** Cerro dos Peixoto, 1 Apr 1985, M. Sobral 3783a (ICN). **Canoas:** 16 Feb 1949, Irmão Teodoro Luis s.n. (ICN 17068, 17069). **Guaíba:** BR-116, km 32, 13 Mar 1993, N.I. Matzenbacher s.n. (ICN 53681). **Osório:** Faz. do Arroio, 14 Apr 1950, B. Rambo s.n. (PACA 46796). **Pântano Grande:** ant. Fazenda Capivarita, 26 Feb 1990, G. Grazziotin et al. s.n. (HUUCS 6591). **Pelotas:** Cerrito Alegre, 8 Mar 1956, O. Pereira s.n. (ICN 1469). **Piratini:** Fazenda São João, 8 Apr 1991, R. Wasum et al. s.n. (HUUCS 7575, 7576). **Portão:** 17 Mar 1986, S. Diesel s.n. (HUUCS 3750). **Porto Alegre:** Jardim Botânico, 11 Mar 1980, O. Bueno 2193 (HAS); Jardim Ingá, 4 Apr 1992, L.T. Pereira 1 (ICN); Morro das Abertas, 26 Mar. 1980, O. Bueno 2281 (HAS); [idem], 08 Apr 1980, O. Bueno 2337 (RB); [idem], 26 Mar 1980, O. Bueno 2281 (RB); Morro do Osso, 25 May 1992, L.T. Pereira 14 (ICN); Morro Santana, 16 Mar 1967, A.G. Ferreira 139 (ICN). **Santa Maria:** Boca do Monte, Mar 1939, ♂, J.E. Vidal 37004 (R); 24 May 1960, Irmão Teodoro Luis s.n. (SMDB 876, 884). **São Francisco de Paula:** entrada para a Serra do Umbu, 1 km, 12 Mar 1994, L.T. Pereira 96 (ICN); Fazenda Mulita, 9 Apr 2001, R. Wasum 1049 (HUUCS). **São Gabriel:** 73Km da saída de São Gabriel, 27 Mar 1985, O. Bueno 4277 (HAS). **São José dos Ausentes:** Silveira, Fazenda do Tabuleiro, 18 Mar 2002, R. Wasum 1405 (HUUCS). **São Leopoldo:** ad montem Sapucaia, 09 Mar 1949, B. Rambo s.n. (PACA); Quinta, 10 Mar 1937, J. Dutra 1536 (ICN). **São Lourenço do Sul:** Passo dos Baios, 25 Feb 2004, G. Heiden 421 (HECT, PEL); [idem], Mar 2006, G. Heiden 648 (RB); G. Heiden 649 (RB). **São Sebastião do Cai:** Vila Rica, 9 Mar 1985, S. Diesel s.n. (PACA 68069). **Sapucaia do Sul:** Morro Sapucaia, 23 Apr 1979, O. Bueno 1295 (HAS). **Taquara:** 07 Apr 1957, J. Mattos 6803 (PACA). **Tramandaí:** Parque Osório, 04 Mar 1994, L.T. Pereira 82 (ICN). **Viamão:** J. Mattos 2249 (HAS).

Selected additional specimens:

Baccharis crispa Spreng. **URUGUAY. MONTEVIDEO:** 1821–1822, ♂, Sellow d397 (ISOTYPE: R).

Baccharis genistelloides subsp. *lorentzii* Joch. Müll. **ARGENTINA. BUENOS AIRES:** “Sierras Pampeanas,” Arroyo Pigue, 22 Mar 1881, ♂, Lorentz s.n. (SP 25365; 25368).

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